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OM protein - protein search, using sw model

Run on: March 28, 2003, 12:09:01 ; Search time 30.3251 Seconds
(without alignments)
1463.971 Million cell updates/sec

Title: US-09-924-946-2
Perfect score: 4180
Sequence: 1 MAWSPATLFLFLLLGQPP.....YPANAELSUEQRLRNLI 756

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 237916 seqs, 58723674 residues

Total number of hits satisfying chosen parameters: 237916

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

- Database : Published Applications AA:*
- 1: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep.*
 - 2: /cgn2_6/ptodata/1/pubpaa/PCR_NEW_PUB.pep.*
 - 3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
 - 4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep.*
 - 5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep.*
 - 6: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
 - 7: /cgn2_6/ptodata/1/pubpaa/PCRUS_PUBCOMB.pep.*
 - 8: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep.*
 - 9: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
 - 10: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep.*
 - 11: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
 - 12: /cgn2_6/ptodata/1/pubpaa/US10_PUBCOMB.pep.*
 - 13: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
 - 14: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Query Match	Score	Length	DB ID	Description
1	4180	100.0	756	10	US-09-924-946-2
2	4174	99.9	756	10	US-09-870-110-2
3	3645.5	87.2	757	10	US-09-823-038A-52
4	3047.5	72.9	573	12	US-10-067-422-10
5	2278.5	54.5	769	10	US-09-835-996A-39
6	2268.5	54.3	774	9	US-09-974-298-122
7	2268.5	54.3	774	10	US-09-782-980-16
8	2268.5	54.3	774	10	US-09-909-743-7
9	2263	54.1	753	10	US-09-782-980-11
10	2263	54.1	753	10	US-09-909-743-2
11	2249	53.8	753	10	US-09-835-996A-29
12	2232	53.4	443	12	US-10-067-422-27
13	2222	53.2	754	10	US-09-782-980-17
14	2222	53.2	754	10	US-09-909-743-8
15	2163.5	51.8	732	10	US-09-835-996A-13
16	1890.5	45.2	608	10	US-09-835-996A-31
17	1773	42.4	641	9	US-09-948-820-51
18	1282	30.7	227	10	US-09-924-946-7
19	833	19.9	170	12	US-10-067-422-14

20	694	15.6	125	10	US-09-924-946-4	Sequence 4, Appli
21	655.5	15.7	1436	9	US-10-042-431-78	Sequence 78, Appl
22	655.5	15.7	1436	9	US-09-759-130B-448	Sequence 448, App
23	633.5	15.2	822	9	US-09-147-947-6	Sequence 6, Appli
24	626	15.0	1116	9	US-09-977-577-10	Sequence 10, Appl
25	626	15.0	1151	9	US-09-977-577-13	Sequence 13, Appl
26	626	15.0	1156	9	US-09-977-577-12	Sequence 12, Appl
27	619.5	14.8	1149	9	US-09-977-577-11	Sequence 11, Appl
28	611.5	14.6	761	9	US-09-147-947-4	Sequence 4, Appli
29	610	14.6	1319	9	US-10-042-431-14	Sequence 14, Appl
30	610	14.6	1319	9	US-09-759-130B-384	Sequence 384, App
31	610	14.6	1413	9	US-10-042-431-13	Sequence 13, Appl
32	610	14.6	1413	9	US-09-759-130B-383	Sequence 383, App
33	610	14.6	1453	9	US-10-042-431-11	Sequence 11, Appl
34	610	14.6	1453	9	US-09-759-130B-381	Sequence 381, App
35	598	14.3	109	10	US-09-924-946-6	Sequence 6, Appli
36	574	13.7	103	10	US-09-924-946-3	Sequence 3, Appli
37	573	13.7	417	10	US-09-782-980-14	Sequence 14, Appl
38	573	13.7	417	10	US-09-909-743-5	Sequence 5, Appli
39	561.5	13.4	574	10	US-09-782-980-15	Sequence 15, Appl
40	561.5	13.4	574	10	US-09-909-743-6	Sequence 6, Appli
41	541	12.9	101	10	US-09-924-946-5	Sequence 5, Appli
42	465	11.1	347	9	US-09-905-291A-148	Sequence 148, App
43	465	11.1	347	9	US-09-902-853-148	Sequence 148, App
44	465	11.1	347	9	US-09-907-824-148	Sequence 148, App
45	465	11.1	347	9	US-09-907-841-148	Sequence 148, App

ALIGNMENTS

RESULT 1

US-09-924-946-2
; Sequence 2, Application US/09924946
; Patent No. US20020102645A1
; GENERAL INFORMATION: American Home Products Corporation
; APPLICANT: Evans, Mark
; APPLICANT: Scicchitano, Marshall
; APPLICANT: Bapat, Ashok
; APPLICANT: Beer, Eric
; APPLICANT: Bhat, Ramesh
; APPLICANT: Ferris, Elissa
; APPLICANT: Mastromeni, Rob
; APPLICANT: Zhang, Jianxiong
; APPLICANT: Karathanasis, Sotirios K.
; TITLE OF INVENTION: A No. US20020102645A1e1 Member of the Lysyl Oxidase Gene Family
; FILE REFERENCE: 0630/1G703-US2
; CURRENT APPLICATION NUMBER: US/09/924,946
; PRIOR FILING DATE: 2001-08-08
; PRIOR APPLICATION NUMBER: 60/223,763
; PRIOR FILING DATE: 2000-08-08
; PRIOR APPLICATION NUMBER: 60/255,838
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 756
; TYPE: PRT
; ORGANISM: Human
US-09-924-946-2

Query Match 100.0%; Score 4180; DB 10; Length 756;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 756; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MAWSPATLFLFLLLGQPPSPQSLGTTKLVGPESKPEGRLEVLHQGWGTVCCD 60

Db 1 MAWSPATLFLFLLLGQPPSPQSLGTTKLVGPESKPEGRLEVLHQGWGTVCCD 60

QY 61 NFAIQEATVACROLGFEAALTWAHSAKYGGGEGPILWLDNVRVCVGTSSLDCCSGNGMVS 120

Db 61 NFAIQEATVACROLGFEAALTWAHSAKYGGGEGPILWLDNVRVCVGTSSLDCCSGNGMVS 120

1 MAWSPATLFLFLLLLGQPPSPQSLGTTKRLVGPES:PEEGRLVHLHQCGMTVCDD 60
61 NFAIOEATVACROGLFEAALTWAHSKYGQEGPIWLDNI RCVGTESLDOCGSGNGVGS 120
61 NFAIOEATVACROGLFEAALTWAHSKYGQEGPIWLDNI RCVGTESLDOCGSGNGVGS 120
121 DCSDHSDVGTCHPRHRGYSILSETVSNALGPQGRRLBEVI LKPI LASAKOHSPTVEGAVE 180
121 DCSDHSDVGTCHPRHRGYSILSETVSNALGPQGRRLBEVI LKPI LASAKOHSPTVEGAVE 180
181 VKYEGHWRQVCDQGWNTMNSRVVCGMLGFPSEVPVDSHY "BKVMDLKMDDPKSRLKSLTN 240
181 VKYEGHWRQVCDQGWNTMNSRVVCGMLGFPSEVPVDSHY "RKVMDLKMDDPKSRLKSLTN 240
241 KNSFWIHQVTCGLTEPHMANCQVAPARGKLRPACPGGTHAVVSCVAGPHFRPPKTKPQ 300
241 KNSFWIHQVTCGLTEPHMANCQVAPARGKLRPACPGGTHAVVSCVAGPHFRPPKTKPQ 300
301 RKGSAEPRVRLRSGAQVGEGRVEVLNMRQWTVCDHRNLI SASVVCROLGFGSAREA 360
301 RKGSAEPRVRLRSGAQVGEGRVEVLNMRQWTVCDHRNLI SASVVCROLGFGSAREA 360
361 LFGARLQGLGPIHLSEVRCRGYERTLSDCPALGSONG "QHENA AAVRCNVPNMGFQNG 420
361 LFGARLQGLGPIHLSEVRCRGYERTLSDCPALGSONG "QHENA AAVRCNVPNMGFQNG 420
421 VRLAGRIPEEGLEVOVEVNGVPRMGVSCSENWGLTEA 4VACROGLGLGFAI HAYKETWF 480
421 VRLAGRIPEEGLEVOVEVNGVPRMGVSCSENWGLTEA 4VACROGLGLGFAI HAYKETWF 480
481 WSGTPRAQEVVMSGVRCSGTELALQOCORHGVHCHSHGG "RFLAGVSCMDSAPDLVMAQ 540
481 WSGTPRAQEVVMSGVRCSGTELALQOCORHGVHCHSHGG "RFLAGVSCMDSAPDLVMAQ 540
541 LVQETAYLEDRPLSOLYCAHEENCLSKSADHMDWPYGYRLLRFFSTQIYNLGRDTPRPT 600
541 LVQETAYLEDRPLSOLYCAHEENCLSKSADHMDWPYGYRLLRFFSTQIYNLGRDTPRPT 600
601 GRDSWVHQCHRRYHSIEVFTHYDLTLNGSKVAEGHKAFCLEDTNCTGLQRRYACAN 660
601 GRDSWVHQCHRRYHSIEVFTHYDLTLNGSKVAEGHKAFCLEDTNCTGLQRRYACAN 660
661 FGEQVTVGCWDTYRHDIDCQWVDITDVGPNGYIFQVIVNPHYVEAESDFSNMLOCRCK 720
661 FGEQVTVGCWDTYRHDIDCQWVDITDVGPNGYIFQVIVNPHYVEAESDFSNMLOCRCK 720
721 YDGHVWLHNCHTGNSYPANAELSLEQORLNLI 756
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RESULT 3

US-09-823-038A-52
; Sequence 52, Application US/09823038A
; Patent No. US20020058335A1
; GENERAL INFORMATION:
; APPLICANT: Strachan, Lorna
; APPLICANT: Sleeman, Matthew
; APPLICANT: Abernethy, Nevin
; APPLICANT: Onrust, Rene
; APPLICANT: Kumble, Anand
; APPLICANT: Murison, Greg
; TITLE OF INVENTION: Compositions Isolated From Stromal Cells
; TITLE OF INVENTION: and Methods For Their Use
; FILE REFERENCE: 11000.1037c3
; CURRENT APPLICATION NUMBER: US/09/823,038A
; CURRENT FILING DATE: 2001-07-09
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 52
; LENGTH: 757
; TYPE: PRT
; ORGANISM: Mouse

121 DCSDHSDVGTCHPRHRGYSILSETVSNALGPQGRRLBEVI LKPI LASAKOHSPTVEGAVE 180
121 DCSDHSDVGTCHPRHRGYSILSETVSNALGPQGRRLBEVI LKPI LASAKOHSPTVEGAVE 180
181 VKYEGHWRQVCDQGWNTMNSRVVCGMLGFPSEVPVDSHY "BKVMDLKMDDPKSRLKSLTN 240
181 VKYEGHWRQVCDQGWNTMNSRVVCGMLGFPSEVPVDSHY "RKVMDLKMDDPKSRLKSLTN 240
241 KNSFWIHQVTCGLTEPHMANCQVAPARGKLRPACPGGTHAVVSCVAGPHFRPPKTKPQ 300
241 KNSFWIHQVTCGLTEPHMANCQVAPARGKLRPACPGGTHAVVSCVAGPHFRPPKTKPQ 300
301 RKGSAEPRVRLRSGAQVGEGRVEVLNMRQWTVCDHRNLI SASVVCROLGFGSAREA 360
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361 LFGARLQGLGPIHLSEVRCRGYERTLSDCPALGSONG "QHENA AAVRCNVPNMGFQNG 420
361 LFGARLQGLGPIHLSEVRCRGYERTLSDCPALGSONG "QHENA AAVRCNVPNMGFQNG 420
421 VRLAGRIPEEGLEVOVEVNGVPRMGVSCSENWGLTEA 4VACROGLGLGFAI HAYKETWF 480
421 VRLAGRIPEEGLEVOVEVNGVPRMGVSCSENWGLTEA 4VACROGLGLGFAI HAYKETWF 480
481 WSGTPRAQEVVMSGVRCSGTELALQOCORHGVHCHSHGG "RFLAGVSCMDSAPDLVMAQ 540
481 WSGTPRAQEVVMSGVRCSGTELALQOCORHGVHCHSHGG "RFLAGVSCMDSAPDLVMAQ 540
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541 LVQETAYLEDRPLSOLYCAHEENCLSKSADHMDWPYGYRLLRFFSTQIYNLGRDTPRPT 600
601 GRDSWVHQCHRRYHSIEVFTHYDLTLNGSKVAEGHKAFCLEDTNCTGLQRRYACAN 660
601 GRDSWVHQCHRRYHSIEVFTHYDLTLNGSKVAEGHKAFCLEDTNCTGLQRRYACAN 660
661 FGEQVTVGCWDTYRHDIDCQWVDITDVGPNGYIFQVIVNPHYVEAESDFSNMLOCRCK 720
661 FGEQVTVGCWDTYRHDIDCQWVDITDVGPNGYIFQVIVNPHYVEAESDFSNMLOCRCK 720
721 YDGHVWLHNCHTGNSYPANAELSLEQORLNLI 756
721 YDGHVWLHNCHTGNSYPANAELSLEQORLNLI 756

RESULT 2

US-09-870-110-2
; Sequence 2, Application US/09870110
; Patent No. US20020068322A1
; GENERAL INFORMATION:
; APPLICANT: Rachel Meyers
; TITLE OF INVENTION: 47765, A No. US20020068322A1el Human Lysyl Oxidase and
; TITLE OF INVENTION: Uses Thereof
; FILE REFERENCE: MNI-160
; CURRENT APPLICATION NUMBER: US/09/870,110
; CURRENT FILING DATE: 2001-05-29
; PRIOR APPLICATION NUMBER: 60/207,650
; PRIOR FILING DATE: 2000-05-26
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 756
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-870-110-2

Query Match 99.9%; Score 4174; DB 10; Length 756;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 755; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

1 MAWSPATLFLFLLLLGQPPSPQSLGTTKRLVGPES:PEEGRLVHLHQCGMTVCDD 60

US-09-823-038A-52

Query Match 87.2%; Score 3645.5; DB 10; Length 757;
Best Local Similarity 86.4%; Pred. No. 4.2e-296;
Matches 654; Conservative 44; Mismatches 58; Indels 1; Gaps 1;
QY 1 MANSPPATLFLFLLLLGQPPSRPQSLGTTKLRLVGPESKPEEGRLEVLHQQWGTVCDD 59
Db 1 MWPQPTFLFLLLLLSQAPSRQSSGPKLRLVGPADRPKEGRLEVLHQQWGTVCDD 60
QY 60 DNFAIQEATVACQQLGFEAALTWASAKYQGGEGPIWLDNVRGVGTGESSLDQCGSGNGWV 119
Db 61 DDFALQEATVACQQLGFEAALTWASAKYQGGEGPIWLDNVRCLGTEKTLDDQCGSGNGW 120
QY 120 SDCHSEDVGVICHPRRHRYGLSETVSNALGPQRRLEEVRLKPIILASAKOHSVPVTEGA 179
Db 121 SDCRHSDEGVGVCHPRRHRYGLSETVSNALGPQRRLEEVRLKPIILASAKRHSVPVTEGA 180
QY 180 EVKYEGRHVRQVCDQGTWNNSRVVCGLGFPSEVPVDSHYRYKRWDLKMRDPKSLT 239
Db 181 EVDYDGHVRQVCDQGTWNNSRVVCGLGFPSEVPVDSHYRYKRWDLKMRDPKSLT 240
QY 240 NKNSFWIHQVTCGLTEPHMANCQVQVAPARGKLRPACPGGMHVVSCVAGPHRPPKTKP 299
Db 241 NKNSFWIHQVTCGLTEPHMANCQVQVAPARGKLRPACPGGMHVVSCVAGPHRPPKTKP 300
QY 300 QKSGSWAEEPRVRLRSGAQVGEGRVEVLMNRQGTVCDDRNLISASVVCRLGFGSARE 359
Db 301 TRKESHAELKVLRLRSGAQVGEGRVEVLMNRQGTVCDDRNLISASVVCRLGFGSARE 360
QY 360 ALFGARLQGLGPIHLSEVRCRGYERTLSDCPALGSGQCGHENAANVCNVPNMWGFQ 419
Db 361 ALFGARLQGLGPIHLSEVRCRGYERTLSDCPALGSGQCGHENAANVCNVPNMWGFQ 420
QY 420 QVRLAGGRIPEEGLLEQVGVNVPWGRVSCSENWGLTEAMVACROGLGFAIHAYKETW 479
Db 421 KVLLAGRNSEEGVEVQVGVNVPWGRVSCSENWGLTEAMVACROGLGFAIHAYKETW 480
QY 480 FWSGTPRAQEVVMSGVRCSGTETALQCCORHGPVCHSHGGGRFLAGVSCMDSAPDLVWNA 539
Db 481 YWQGTPEAKEVMSGVRCSGTETALQCCORHGPVCHSHGGGRFLAGVSCMDSAPDLVWNA 540
QY 540 QLVQETAYLEDRPLSOLYCAHEENCLSKSADHMDWPYGYRRLLRFPSTQIYNLGRDTRPK 599
Db 541 QLVQETAYLEDRPLSOLYCAHEENCLSKSADHMDWPYGYRRLLRFPSTQIYNLGRDTRPK 600
QY 600 TGRSWWVHCHRYHYSLEVTHYDILLTNGSKVAEGHKASFCLDTCPTGLORRYACA 659
Db 601 AGRHSWVHCHRYHYSLEVTHYDILLTNGSKVAEGHKASFCLDTCPTGLORRYACA 660
QY 660 NFGQGVTVGCDTYRHDDICQWVDITDVGPGNYIFQVIVNPHYEAESDFSNMLQCR 719
Db 661 NFGQGVTVGCDTYRHDDICQWVDITDVGPGNYIFQVIVNPHYEAESDFSNMLQCR 720
QY 720 KYDGRVWLNCHTGNSPANAEUSLEQEQRLRNLI 756
Db 721 KYDGRVWLNCHTGNSPANAEUSLEQEQRLRNLI 757

RESULT 4
US-10-067-422-10
; Sequence 10, Application US/10067422
; Patent No. US20020143170A1
; GENERAL INFORMATION:
; APPLICANT: Ni et al.
; TITLE OF INVENTION: Bone Morphogenic Protein (BMP) Polynucleotides, Polypeptides, and
; TITLE OF INVENTION: Antibodies
; FILE REFERENCE: PT004P1
; CURRENT APPLICATION NUMBER: US/10/067,422
; CURRENT FILING DATE: 2002-02-07
; PRIOR APPLICATION NUMBER: 09/685,899
; PRIOR FILING DATE: 2000-10-11
; PRIOR APPLICATION NUMBER: PCT/US00/09028

Query Match 72.9%; Score 3047.5; DB 12; Length 573;
Best Local Similarity 98.6%; Pred. No. 2.6e-246;
Matches 563; Conservative 0; Mismatches 3; Indels 5; Gaps 2;
QY 1 MANSPPATLFLFLLLLGQPPSRPQSLGTTKLRLVGPESKPEEGRLEVLHQQWGTVCDD 60
Db 1 MANSPPATLFLFLLLLGQPPSRPQSLGTTKLRLVGPESKPEEGRLEVLHQQWGTVCDD 60
QY 61 NFPAIQEATVACQQLGFEAALTWASAKYQGGEGPIWLDNVRGVGTGESSLDQCGSGNGWVS 120
Db 61 NFPAIQEATVACQQLGFEAALTWASAKYQGGEGPIWLDNVRGVGTGESSLDQCGSGNGWVS 120
QY 121 DCHSHEDVGVICHPRRHRYGLSETVSNALGPO--GRRLEEVRLKPIILASAKOHSVPVTEGA 178
Db 121 DCHSHEDVGVICHPRRHRYGLSETVSNALGPOGGR---GRKPIILASAKOHSVPVTEGA 177
QY 179 VEKYEGRHVRQVCDQGTWNNSRVVCGLGFPSEVPVDSHYRYKRWDLKMRDPKSLT 238
Db 178 VEKYEGRHVRQVCDQGTWNNSRVVCGLGFPSEVPVDSHYRYKRWDLKMRDPKSLT 237
QY 239 TNKNSFWIHQVTCGLTEPHMANCQVQVAPARGKLRPACPGGMHVVSCVAGPHRPPKTK 298
Db 238 TNKNSFWIHQVTCGLTEPHMANCQVQVAPARGKLRPACPGGMHVVSCVAGPHRPPKTK 297
QY 299 POKSGSWAEEPRVRLRSGAQVGEGRVEVLMNRQGTVCDDRNLISASVVCRLGFGSAR 358
Db 298 POKSGSWAEEPRVRLRSGAQVGEGRVEVLMNRQGTVCDDRNLISASVVCRLGFGSAR 357
QY 359 EALFGARLQGLGPIHLSEVRCRGYERTLSDCPALGSGQCGHENAANVCNVPNMWGFQ 418
Db 358 EALFGARLQGLGPIHLSEVRCRGYERTLSDCPALGSGQCGHENAANVCNVPNMWGFQ 417
QY 419 NQVRLAGGRIPEEGLLEQVGVNVPWGRVSCSENWGLTEAMVACROGLGFAIHAYKET 478
Db 418 NQVRLAGGRIPEEGLLEQVGVNVPWGRVSCSENWGLTEAMVACROGLGFAIHAYKET 477
QY 479 WFWSGTPRAQEVVMSGVRCSGTETALQCCORHGPVCHSHGGGRFLAGVSCMDSAPDLVW 538
Db 478 WFWSGTPRAQEVVMSGVRCSGTETALQCCORHGPVCHSHGGGRFLAGVSCMDSAPDLVW 537
QY 539 AOLVQETAYLEDRPLSOLYCAHEENCLSKSA 569
Db 538 AOLVQETAYLEDRPLSOLYCAHEENCLSKSA 568

RESULT 5
US-09-835-996A-39
; Sequence 39, Application US/09835996A
; Patent No. US20020142953A1
; GENERAL INFORMATION:
; APPLICANT: Ballinger, Dennis
; APPLICANT: Loeb, Debra
; APPLICANT: Montgomery, Julie
; APPLICANT: Tang, Y. Tom
; APPLICANT: Zhou, Ping
; APPLICANT: Goodrich, Ryle

Wed Apr 2 09:14:00 2003

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; APPLICANT: Liu, Chonghua
; APPLICANT: Asundi, Vinod
; APPLICANT: Zhao, Qing
; APPLICANT: Wehrman, Tom
; APPLICANT: Drmanac, Radoje
; APPLICANT: Ren, Feiyun
; APPLICANT: Qian, Xiahong
; APPLICANT: Wang, Dunrui
; TITLE OF INVENTION: MATERIALS AND METHODS RELATING TO LIPID METABOLISM
; FILE REFERENCE: 28110/35915A
; CURRENT FILING DATE: 2001-04-16
; PRIOR FILING DATE: 2001-04-16
; PRIOR FILING DATE: 2000-04-14
; PRIOR FILING DATE: 2000-04-14
; PRIOR FILING DATE: 2000-11-17
; PRIOR FILING DATE: 2000-09-22
; PRIOR FILING DATE: 2000-08-03
; PRIOR FILING DATE: 2000-06-20
; NUMBER OF SEQ ID NOS: 45
; SOFTWARE: Patent in version 3.0
; SEQ ID NO 39
; LENGTH: 769
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-835-996A-39

Query Match 54.5%; Score 2278.5; DB 10; Length 769;
Best Local Similarity 55.1%; Pred. No. 6.8e-182;
Matches 422; Conservative 106; Mismatches 205; Indels 33; Gaps 11;

QY 3 WSPATLFLFL--LLGPPPS-----RPSLGLTKRLVGPSPKPEGRLEVLHQGWG 55
DB 9 WSPGCLLLCLLSCSLGSPSTGPKKAGSQG-LRFLAGFPKPKYGRVRIORAGWG 67
QY 56 TVCDNFALFOATVACROLGFEALTAHSAKYGGGPIWLDNVRVCVGTSSLDQCSN 115
DB 68 TICDDFTLQAAHLCHRELGTATGTHSAKYGGPIGTRIWLDNLSGSGTEQSVTECASR 127
QY 116 GWGSDCSHSDVGVCHPRRHRYLSETVSNALGPQGRLEBVLKPLASAKQHSPTV 175
DB 128 GWGNSDCTHEDAGVICKDQRLPGFSDSNVIEV--EHLQVEVRIKPAVWGRRPLPVT 185
QY 176 EGAVEVKEGHWRCVDCOGTMNNSRVVCGMLGFPSEVPVDVSHYRKV---WDLKMRDP 231
DB 186 EGLVEVRLPDGMSQVCDKGMGSAHNSHVCGMLGFPSEKRVNAAPYKRLKRAAKVSARHP 245
QY 232 K--SRKSLTNKNNSPIHQTCLGTEPHMANCOVQVAPARGKLRPACPGMHAVVSCVAG 289
DB 246 KPLGRLLAQROQHSFELGHVACVGTAEHLSCSLSEFFRANDTAR--CPGGPAAVSCVPG 303
QY 290 PHF-----RPPKTPQKXGSAEPRVRLRSGAQVGEGRVEVLMNRQWTCVCDHRNL 342
DB 304 PVYAASSGKKQKQKQPQ-----GEARVRLKGAHPGEGREVEVLKASTWGTVCDRKWL 357
QY 343 IGASVVCROLGFGSAREALFGARLGQGLGPIHLSEVRCRGYERTLSDCPALGSGSCQH 402
DB 358 HAASVVCRELFGSAREALSGARMQCGMGAHLSEVRCSGQELSLWKCPKHNITAECDSH 417
QY 403 ENAAAVRCNVPNMGFQNOVRLAGGRIPREGLEVEVQVNVGVPVRCGVCSENWGLTEAMVA 462
DB 418 SODAGVRCNLPTVGAETRIIRLSGGRSQHREGRVEVIGGPIRLWGLICGDDWGTLEAWVA 477
QY 463 CROGLGFGFAHAYKETFWMSGTPRAQEVVMGVCVRCGSGTEALQCCQRRHP--VHCSHGGGR 521
DB 478 CROGLGLYANHGLQETWYND--SGNITEVVMGVCVRCGSGTEALQCCQRRHP--VHCSHGGGR 536
QY 522 FLAGVSCMDSAPLVMNAQLVOETAYLDRPLSOLYCAHEENCLSKSDHMDWPGYVRL 581
DB 537 FTAGVICSETASDLLHLSALVOETAYIEDRPLHMLYCAAEENCLASSARSANWPGYHRL 596

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QY 582 LRFSTQIYNLGRDTRPKTGRDSDSWWHQCHRRVHSLVPTHYDILLTLNGSKVAEGHKASF 641
DB 597 LRFSSQIHLGRADFRPKAGRHSWWHECHGHVHSMDFIHYDILTPNGTKVAEGHKASF 656
QY 642 CLEDTNCPGTGQRRYACANFOEQVTVGCWDTYRHDIDCCWVDITDVGPNYIFQVIVNP 701
DB 657 CLEDTCEQEDYSKRYECANFOEQITVGCWDLVYRHDIDCCWIDITDVKPNYILOVVNP 716
QY 702 HVEVAESDFSNMLQCRCKYDGHVHLNCHTGNSTYFANZELSLEQ 747
DB 717 NFEVAESDFTNNAKMCNKCKYDGHRIWHNCHIGDRAFSEFHRFRER 762

RESULT 6
US-09-974-298-122
; Sequence 122 Application US/09974298
; Patent No. US20020156263A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Hwei-Mei
; TITLE OF INVENTION: GENES EXPRESSED IN BREAST CANCER
; FILE REFERENCE: PA-0037 P
; CURRENT APPLICATION NUMBER: US/09/974,298
; PRIOR FILING DATE: 2001-10-04
; CURRENT APPLICATION NUMBER: 60/238,331
; PRIOR FILING DATE: 2000-05-10
; NUMBER OF SEQ ID NOS: 194
; SOFTWARE: PERL Program
; SEQ ID NO 122
; LENGTH: 774
; TYPE: PRT
; ORGANISM: Homo sapiens
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. US20020156263A1 2161632CD1
US-09-974-298-122

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Query Match 54.3%; Score 2268.5; DB 9; Length 774;
Best Local Similarity 55.1%; Pred. No. 4.7e-181;
Matches 408; Conservative 119; Mismatches 190; Indels 23; Gaps 7;

QY 21 PSRPQSGLTKRLVGPSPKPEGRLEVLHQGWGTVCDNFALFOATVACROLGFEAL 80
DB 47 PQAPANVAKIQLRLAGQKRKHSEGRVEVYDQGWGTVCDDFSIHAHVVCRELGYVEAK 106
QY 81 TWAHSAKYGGGPIWLDNVRVCVGTSSLDQCSNGWVSDCSHSDVGVICHPRRHRY 140
DB 107 SWTASSYSGKGGPIWLDNHLCTGNEATLAACCTSNMGVTDCKHTEDVGVCGDKRIFG 166
QY 141 -LSETVSNALGPQGRLEBVLKPLASAKQHSPTVTEGAVEVKEGHWRCVDCQWMTNN 199
DB 167 KFDNSLI NOIENLNIQVEDIRAILUSTYRKRTVWEGIVEVEKGTWKQICDKHTAKN 226
QY 200 SRVVCGLGFPSEVPVDVSHYRKVWDLKMRDPKSLKSI TNKNSFWIHQVTCLGTEPHMA 259
DB 227 SRVVCGLGFPSEVPVDVSHYRKVWDLKMRDPKSLKSI TNKNSFWIHQVTCLGTEPHMA 273
QY 260 NC-----QVQVAPARGKLRPACPGMHAVVSCVAGPHFRIPKTPQKXGSAEPRVRLRS 315
DB 274 SCKLGPVSLDPMK---NVTCENGLPAVSCVQGVFSIDGSPFRKAYKPEQPIVRLRG 330
QY 316 GAQVGEGRVEVLMNRQWTCVCDHRNLISASVVCRLQGLGSAFEALFGARLGQGLPIHL 375
DB 331 GAYICEGRVEVLMNRQWTCVCDHRNLISASVVCRLQGLGSAFEALFGARLGQGLPIHL 390
QY 376 SVRCRGYERTLSDCPALGSGSCQHENAARVNCNVPIMGFQNOVRLAGGRIPREGLE 435
DB 391 NEIQTCTGNEKGIIDCKFNAESQ--GCHHEEDAGVRCNTPAMGLOKRLNNGRNPYGRVE 449
QY 436 VQEVNMGVPRGSCVCSENWGLTEAMVACROLGGLGFAHAYKETFWMSGTPRAQEVVMGSGV 495
DB 450 VLVERNSGLVMGVCQNGWIVEAMVVCRLQGLGFASN.FQETHYWGIDVNSKNVMSGV 509

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QY 496 RCGSTELALQOCQRHG-PVHCSHGGRFLAGVSCMSADPLVMNAQLVOETAYLEDRLPS 554
Db 510 KCSGTLSLAHCRHGDGEDVACPGQGVQYAGVACSETAPDLVLAEMVQOTTYLEDRLPMF 569
QY 555 QLYCAHEENCLSKSADHMDMPYGYRRLRFPSTQIYNLGRDTPRPKTGRDSWVWHQCHRRY 614
Db 570 MLOCAMEENCLSSASAAQTPTTGYRRLRFPSSQIHNNQSDFRPKNGRHWIWHDCRRHY 629
QY 615 HSTIEVTHYDILLTNGSKVAEGHKASFCLEDTNCPGLQRRYACANFGEGVTVGCWDTY 674
Db 630 HSMVEVTHYDILLNLTNGKVAEGHKASFCLEDTNCPGLQRRYACANFGEGVTVGCWDMY 689
QY 675 RHDIDCQWVDITDVGPNYIFQVIVNPHYVEASDFSNMLQCRCKYDGRVWLHNCHTG 734
Db 690 RHDIDCQWVDITDVPDGYLQVWINPNEVEASDYSNNIMKCRSYDGRHIMWYNCHIG 749
QY 735 NSYPANAELSLEQORLRNN 754
Db 750 GSFSEETEKKEHFHSGLLNN 769

RESULT 7

US-09-782-980-16
; Sequence 16, Application US/09/782980
; Patent No. US20020072089A1
; GENERAL INFORMATION:
; APPLICANT: Khodadoust, Mehran M.
; APPLICANT: MacBeth, Kyle J.
; APPLICANT: Busfield, Samantha J.
; APPLICANT: McCarthy, Sean A.
; APPLICANT: Holtzman, Douglas A.
; APPLICANT: Gu, Wei
; APPLICANT: White, David
; APPLICANT: Pan, Yang
; TITLE OF INVENTION: NOVEL ITALY, LOR-2, STRIFE, TRASH, BDSF, LRSG, AND
; TITLE OF INVENTION: STWST PROTEIN AND NUCLEIC ACID MOLECULES AND USES
; TITLE OF INVENTION: THEREFOR
; FILE REFERENCE: MNI-121CP
; CURRENT APPLICATION NUMBER: US/09/782,980
; CURRENT FILING DATE: 2001-02-13
; PRIOR APPLICATION NUMBER: PCT/US00/02125
; PRIOR FILING DATE: 2000-01-27
; PRIOR APPLICATION NUMBER: 09/448,076
; PRIOR FILING DATE: 1999-11-23
; PRIOR APPLICATION NUMBER: 09/276,400
; PRIOR FILING DATE: 1999-03-25
; PRIOR APPLICATION NUMBER: 60/117,580
; PRIOR FILING DATE: 1999-01-27
; PRIOR APPLICATION NUMBER: 09/014,195
; PRIOR FILING DATE: 1998-01-27
; PRIOR APPLICATION NUMBER: 09/014,348
; PRIOR FILING DATE: 1998-01-27
; PRIOR APPLICATION NUMBER: 09/086,892
; PRIOR FILING DATE: 1998-05-29
; PRIOR APPLICATION NUMBER: 09/296,208
; PRIOR FILING DATE: 1999-04-21
; PRIOR APPLICATION NUMBER: 09/063,950
; PRIOR FILING DATE: 1998-04-21
; PRIOR APPLICATION NUMBER: 09/561,381
; PRIOR FILING DATE: 2000-04-28
; PRIOR APPLICATION NUMBER: 09/561,810
; PRIOR FILING DATE: 2000-04-28
; PRIOR APPLICATION NUMBER: 09/087,121
; PRIOR FILING DATE: 1998-05-29
; PRIOR APPLICATION NUMBER: 09/672,721
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: 09/049,799
; PRIOR FILING DATE: 1998-03-27
; NUMBER OF SEQ ID NOS: 176
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 16
; LENGTH: 774
; TYPE: PRT

; ORGANISM: Homo sapiens
US-09-782-980-16
Query Match 54.3%; Score 2268.5; DB 10; Length 774;
Best Local Similarity 55.1%; Pred. No. 4.7e-181;
Matches 408; Conservative 119; Mismatches 190; Indels 23; Gaps 7;
QY 21 PSRPSLGTTLRLVGPSPKSEBGRLEVLHQQWGTVCDDNFALQEOATVACRLQFEAL 80
Db 47 POAPNAVAKIQLRLAGQRKKGSEGRVYVYDQWGTVCDDDFSIHAAHVVCRLQFEAL 106
QY 81 TWAHSAKYQGGSGPTWLDNVRVCGTSSLDQCSNGWGVSDCHSESDVGVICHPRRHY 140
Db 107 SWTASSYKGGEGPTWLDNLHCTGNEATLACTSNWGTVDCKHTEDGVVCSDRIFGP 166
QY 141 -LSETSNALGPQGRLEEVRLKPLILASAKQHSPTYEGAVEYKYEGRHVRQVDCQWMTNN 199
Db 167 KFDNSLINQINLIQVEDIRAILSTYRKRTPTWEGYVEVEKGTWKQICDKHTAKN 226
QY 200 SRVCGMLGFPSEVPVDSHYRYKWDLMKDRPKSLKSLTNKNSFWIHOVTCGLTEPHMA 259
Db 227 SRVCGMFGPGE---RTYNTKVY-----KMFASRRKQRYWPFMDCTGTEAHTS 273
QY 260 NC---QVOVAPARGKLRPACPGGMHVVSVAGPFPPTKTPORKGSAEPRVRLRS 315
Db 274 SKLGPQVSLDPMK---NVTCEGLPAAVVCVPGQVFPDGPSPFRKAYKPEQLVRLRG 330
QY 316 GAQVGEGRVEVLNMRQWGTVCDDRWNLIASVYCRQLGFGSAREALFGARLQOGLPIHL 375
Db 331 GAYIGEGRVEVLKNGEWGTVCDDKWDLYSASVVCRELFGSAAKAVTGSRLQOGIPIHL 390
QY 376 SEVRCRGYERTLSDCPALGSGQNGCHENAAAVRNVNPMGFQNVRLAGGRIPBEGGLE 435
Db 391 NBIQCTGNEKSIIDCKFNAESQ-GCNHEEDAGVRCNTFAMGLQKRLRLNGRNPYGRVE 449
QY 436 VQVEVNGVPRWGSVCSENWGLTEAMVACRQLGLGFAIHAYKETWFSGTTPRAQEVVMSGV 495
Db 450 VLVERNGSLVWGVCGQNGVIEAMVVCQGLGFSANAFQETIWHGVDNKNVVMSCV 509
QY 496 RCGSTELALQOCQRHG-PVHCSHGGRFLAGVSCMSADPLVMNAQLVOETAYLEDRLPS 554
Db 510 KCSGTLSLAHCRHGDGEDVACPGQGVQYAGVACSETAPDLVLAEMVQOTTYLEDRLPMF 569
QY 555 QLYCAHEENCLSKSADHMDMPYGYRRLRFPSTQIYNLGRDTPRPKTGRDSWVWHQCHRRY 614
Db 570 MLOCAMEENCLSSASAAQTPTTGYRRLRFPSSQIHNNQSDFRPKNGRHWIWHDCRRHY 629
QY 615 HSTIEVTHYDILLTNGSKVAEGHKASFCLEDTNCPGLQRRYACANFGEGVTVGCWDTY 674
Db 630 HSMVEVTHYDILLNLTNGKVAEGHKASFCLEDTNCPGLQRRYACANFGEGVTVGCWDMY 689
QY 675 RHDIDCQWVDITDVGPNYIFQVIVNPHYVEASDFSNMLQCRCKYDGRVWLHNCHTG 734
Db 690 RHDIDCQWVDITDVPDGYLQVWINPNEVEASDYSNNIMKCRSYDGRHIMWYNCHIG 749
QY 735 NSYPANAELSLEQORLRNN 754
Db 750 GSFSEETEKKEHFHSGLLNN 769
RESULT 8
US-09-909-743-7
; Sequence 7, Application US/09909743
; Patent No. US20020151007A1
; GENERAL INFORMATION:
; APPLICANT: Khodadoust, Mehran et al.
; TITLE OF INVENTION: METHODS OF USE OF A NOVEL LYSYL OXIDASE-RELATED
; TITLE OF INVENTION: PROTEIN
; FILE REFERENCE: MNI-073CP
; CURRENT APPLICATION NUMBER: US/09/909,743
; CURRENT FILING DATE: 2001-07-20
; PRIOR APPLICATION NUMBER: 09/448,076
; PRIOR FILING DATE: EARLIER FILING DATE: 1999-11-23

us-09-924-946-2.rapb

Wed Apr 2 09:14:00 2003

; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/276,400
 ; PRIOR FILING DATE: EARLIER FILING DATE: 1999-03-25
 ; NUMBER OF SEQ ID NOS: 12
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 7
 ; LENGTH: 774
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-09-909-743-7

Query Match 54.3%; Score 2268.5; DB 10; Length 774;
 Best Local Similarity 55.1%; Pred. No. 4.7e-181;
 Matches 408; Conservative 119; Mismatches 190; Indels 23; Gaps 7;

QY 21 PSRPSQISGTTKRLVGPESKEGRLEVLHOGQWGTVCDDNFALQEAATVACRQLGFEEAL 80
 DB 47 PQAFANVAKIQLRLACOKRKHSEGRVEVYDQWGTVCDDDFSIHAAHVVCRELGYVEAK 106
 QY 81 TWAHSAKYGOGEPIWLDNVRVCVTGESSLDQCGSNGWSDCSHEDVGVICHPRRHGY 140
 DB 107 SWTASSYKGEGPIWLDNURHCTGNEATLAACTSNGWVTDCKHTEDVGVCSKRIPIGF 166
 QY 141 LSETVSNALGPQGRRLLEEVRLPEILASAKQHSPTVEGAVEVYEGHNRQVDCQCHTWN 199
 DB 167 KFDNSLNIQENLNIQEDIRAILSTYRKTPVMEGVYEVKEGKTWKQICDREHTAKN 226
 QY 200 SRVCGMLGPPSEVPVDSHYRYKWKMDPKSRSLKSLTNKNSFIHQVTCCLGTSPHMA 259
 DB 227 SRVCGMGFPGE-----RTYNTKY-----KMFASRRKQRYWPFMSMDCGTGEAHIS 273
 QY 260 NC-----QVQVAPARKULRPACPGMGHVAHVCVAGPHRPKTPQRKGSMAEPRVRLRS 315
 DB 274 SKCLGPQVSLDPMK---NVTCEGLPAVWSCVPGQVSPDGPSPFRKAYKPEGLVRLRG 330
 QY 316 GAQVCEGRVEVLNMRQWGTCDHREWNLIISASVCRQLGFGSAREALFGARLGGGLPIHL 375
 DB 331 GAYIGRVEVLKNGEWTVCDDKMDLVASVVCRELFGSAKEAVTGSRLGGIGIPIHL 390
 QY 376 SEVRCRGVETLSDCPALEGSONGCHENAAVRCNVNPMNGFQNVQVLAGGRIPESGLLE 435
 DB 391 NBIQCTGNEKSIIDCKFNAESQ-GONHEEDAGVRCNTPAMCLOKRLNLRNPNYEGRVE 449
 QY 436 VQVEVNGVPRMGVSCSENGLUTEAMVACRQLGLGFALHAYKETWFWSGTTRAEVVMGV 495
 DB 450 VLVERNGSLVGMVCGQNGVIEAMVVCRLGLGFAGNAFQETWYHGDVNSKNKVMVSGV 509
 QY 496 RCGSTELALQCCORHG-PVHCSHGGRFLAGVSCWDSAPDLVMAQLVQETAYLEDRPLS 554
 DB 510 KCSGIELSLAHRHGEDVACPGQGVQVAGVACSETAPDLVLAEMVQOTTYLEDRPMP 569
 QY 555 QLYCAHEENCLSKADHMDWPYGYRLLRFSTQIYNLGRDTPRKTRGDSWVWHCHRRY 614
 DB 570 MIQCAHEENCLSKASAAQDPTTGYRLLRFSSQIHNGQSDFRPNGRHAWIHDCHRY 629
 QY 615 HSTEVTHYDLLTLNGSKVAEGHKASFLEDTNCTPTGLQRRYACANFGEQGVTCWMDTY 674
 DB 630 HSMVEVTHYDLLNLNLTAKVAEGHKASFLEDTCEGDIQKNYECANFGDQGITWGWMDY 689
 QY 675 RHIDICQWVIDTDPGCVNIPOVINPNHVEAESDFSNMLQCRCKYDGRVWLHNCHTG 734
 DB 690 RHIDICQWVIDTDPGCVNLFQVINPNHVEAESDYSNNIMKCRSYDGRHIMWYNCHIG 749
 QY 735 NSYPANAELSLQEQRLRN 754
 DB 750 GSPSEETEKKEFHFGSLNN 769

RESULT 9
 US-09-782-980-11
 ; Sequence 11, Application US/09782980
 ; Patent No. US20020072089A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Khodadoust, Mehran M.

; APPLICANT: MacBeth, Kyle J.
 ; APPLICANT: Busfield, Samantha J.
 ; APPLICANT: McCarthy, Sean A.
 ; APPLICANT: Holtzman, Douglas A.
 ; APPLICANT: Gu, Wei
 ; APPLICANT: White, David
 ; APPLICANT: Pan, Yang
 ; TITLE OF INVENTION: NOVEL ITALY, LOR-2, STRIFE, TRASH, BDSF, LRSG, AND
 ; TITLE OF INVENTION: STMT PROTEIN AND NUCLEIC ACID MOLECULES AND USES
 ; TITLE OF INVENTION: THEREFOR
 ; FILE REFERENCE: MNI-121CP
 ; CURRENT APPLICATION NUMBER: US/09/782,980
 ; PRIOR FILING DATE: 2001-02-13
 ; PRIOR APPLICATION NUMBER: PCT/US00/02125
 ; PRIOR FILING DATE: 2000-01-27
 ; PRIOR APPLICATION NUMBER: 09/448,076
 ; PRIOR FILING DATE: 1999-11-23
 ; PRIOR APPLICATION NUMBER: 09/276,400
 ; PRIOR FILING DATE: 1999-03-25
 ; PRIOR APPLICATION NUMBER: 60/117,580
 ; PRIOR FILING DATE: 1999-01-27
 ; PRIOR APPLICATION NUMBER: 09/014,195
 ; PRIOR FILING DATE: 1998-01-27
 ; PRIOR APPLICATION NUMBER: 09/014,348
 ; PRIOR FILING DATE: 1998-01-27
 ; PRIOR APPLICATION NUMBER: 09/086,892
 ; PRIOR FILING DATE: 1998-05-29
 ; PRIOR APPLICATION NUMBER: 09/296,208
 ; PRIOR FILING DATE: 1999-04-21
 ; PRIOR APPLICATION NUMBER: 09/063,950
 ; PRIOR FILING DATE: 1998-04-21
 ; PRIOR APPLICATION NUMBER: 09/561,381
 ; PRIOR FILING DATE: 2000-04-28
 ; PRIOR APPLICATION NUMBER: 09/561,810
 ; PRIOR FILING DATE: 2000-04-28
 ; PRIOR APPLICATION NUMBER: 09/087,121
 ; PRIOR FILING DATE: 1998-05-29
 ; PRIOR APPLICATION NUMBER: 09/672,721
 ; PRIOR FILING DATE: 2000-09-28
 ; PRIOR APPLICATION NUMBER: 09/049,799
 ; PRIOR FILING DATE: 1998-03-27
 ; NUMBER OF SEQ ID NOS: 176
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 11
 ; LENGTH: 753
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-09-782-980-11

Query Match 54.1%; Score 2263; DB 10; Length 753;
 Best Local Similarity 54.5%; Pred. No. 1.3e 180;
 Matches 419; Conservative 105; Mismatches 205; Indels 40; Gaps 10;

QY 3 WSPPATLFLFL--LLGQPPPS-----RPOSGLTTLKL..VGPESKEGRLEVLHOGQW 55
 DB 9 WSPWGLLLCLLSCSLGSPSPSTGTPEKAGSQG-LRFR JAGFPKPYEGRVEIQRAGEW 67
 QY 56 TVCCDNFAIQEATVACRQLGFEEALTWAHSAKYGOGEPIWLDNVRVCVTGESSLDQCGSN 115
 DB 68 TICDDPFTLQAAHILCRELGFTEATGTHSAKYGPGTGTIWLNDLSCSGTGEQSVTECASR 127
 QY 116 GNGVSDCSHSESDVGVICHPRRHGYLSETVSNALGPQGRLEEVRLKPIILASAKQHSPT 175
 DB 128 GNGNSDCTHDEADAGVICKDQRLPGFSDSNVIEV--EHLQVEEVRIIPAVGWRPLPVT 185
 QY 176 EGAVEVKEGHRQVQCDQGTWMTNNSRVVCGMLGFPSEVPVDSHYRYKWKMDPKSRSL 235
 DB 186 EGLVEVRLPDGWSQVCDKGWSAHNSHVVCGLGFPSEKRVNAFY-----RL 232
 QY 236 KSLTNKNSFIHQVTCCLGTSPHMAHVCVAGPHRPKTPQRKGSMAEPRVRLRS 292
 DB 233 LAORQOHSEGLHGVACVGTGAHLSCSLFTRANDTAF--CPGCGPAAVSCVPGVVAAS 290

Wed Apr 2 09:14:00 2003

NUMBER OF SEQ ID NOS: 45
 ; SOFTWARE: PatentIn version 3.0
 ; SEQ ID NO 29
 ; LENGTH: 753
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-09-835-996A-29

Query Match 53.8%; Score 2249; DB 10; Length 753;
 Best Local Similarity 54.4%; Pred. No. 1.9e-179;
 Matches 418; Conservative 104; Mismatches 207; Indels 40; Gaps 10;

QY 3 WSPATLFLPL--LLGQPPS-----RQSLGTTKLRLVGPESKPERGLVHLHQSGW 55
 DB 9 WSPWGLLLCLLSCSLGSPSPGPKKASQGLRFLAGFPKPYEGYRIGRAGWG 67
 QY 56 TVCDNDAFAIQEATVACQQLGFEAALTWASIKYQOGEHIMLDNVCVGTSTSSLDQCSN 115
 DB 68 TICDDDFLQAAHILCRELGFTGATWTHSAKYGPOTGRIMLDNLSGSGTEQSVECA 127
 QY 116 GWGVSCHSHEDGVICHPRRRHGYLSETVSNALGPGRRRLBEVRLKPIASAKOHSVPT 175
 DB 128 GWGNSDCTHEDAGVICKDQRLGFSDSNVIEV--BHILQVEVRIRPAVGMGRPLPT 185
 QY 176 EGAVEVEYEGHWRQVCDQGTMTNNSRVVCGMLGFPSEVPVDSHYKRWDLKWRDPK 235
 DB 186 ECLVEVRLPDGWSQVCDKGSAHNSHVVCMLGFPSEKRVNAFY-----RL 232
 QY 236 KSLTNKNSFWIHQVTCLTGTEPHMANCOVQVAPARGKLRPACPGMHAVVSCVAGPHF 292
 DB 233 LAQROQHSFGLHGACVTEAHLSCLSLEFVRANDTAR--CPGGPAVVSVPVGPVYAA 290
 QY 293 ----RPPKTKPORKGSAEPRVRLRSGAOGEGRVEVLMNRQWGTVCDSHNMNLI 348
 DB 291 SGQRKQOQSKFO-----GEVRLKGAHPGEGRVEVLAASVGTGVCYRKNDLHA 344
 QY 349 CRLGFGSAREALFARLQGLGPIHLSEVRCRGYERTLSDCPALEGSQNGCOHENA 408
 DB 345 CRELGFGSAREALSARMQOQMGAIHLSEVRCRGYERTLSDCPALEGSQNGCOHENA 404
 QY 409 RCNVNMGFQNOVRIAGRIPEEGLELLEVOVNVGVPWPGVSCSENWGLTEAMVAC 468
 DB 405 RCNLPYTGAETIRLUSGRSQHGEVVOIGPGPLRGLICGDWGTLEAMVACRQLG 464
 QY 469 GFALHAYKETWFSWGTTPRAQEVVMSGVRCSTGTELALQOCQPHGP-VHC 527
 DB 465 GYANHGLQETWYD--SGNITEVMSGVRCSTGTELALQOCQPHGP-VHC 523
 QY 528 CSDSAPDLVMAQLVOETAYLEDRLPSQLYCAHEENCLSKADHMWPYGVRRLLR 587
 DB 524 CSETASDLLLSALVOETAYIEDRLPLMLYCAAEENCCLASSARSANWPYGH 583
 QY 588 IYNLGRDTPRPTGRDSWVWVHCHRYHHSIEVTFHYDILLTNGSKVARGHKASF 647
 DB 584 IHNLGRADFPKAGRHSWVWHECHGHYHSMDFTHYDILLTPNGTKVARGHKASF 643
 QY 648 CPTGLORRYACANFGQGVTCWDTYRHDIDCWMDITDVGPGNYIFQVIVNPHY 707
 DB 644 QSDVSKRYECANFGQGVTCWDTYRHDIDCWMDITDVGPGNYIFQVIVNPHY 703
 QY 708 SDFSNMQLCRCKYDGRVWHLNCHTGNYPANAELSLFEOQLRNLNLI 756
 DB 704 SDFTNNAKCNCKYDGRHIVWLNCHTGNYPANAELSLFEOQLRNLNLI 752

RESULT 12
 US-10-067-422-27
 ; Sequence 27, Application US/10067422
 ; Patent No. US20020143170A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Ni et al.
 ; TITLE OF INVENTION: Bone Morphogenic Protein (BMP) Polynucleotides, Polypeptides, and
 ; TITLE OF INVENTION: Antibodies

FILE REFERENCE: PT004P1
 ; CURRENT APPLICATION NUMBER: US/10/067,422
 ; CURRENT FILING DATE: 2002-02-07
 ; PRIOR APPLICATION NUMBER: 09/685,899
 ; PRIOR FILING DATE: 2000-10-11
 ; PRIOR APPLICATION NUMBER: PCT/US00/09028
 ; PRIOR FILING DATE: 2000-04-06
 ; PRIOR APPLICATION NUMBER: 60/152,933
 ; PRIOR FILING DATE: 1999-09-09
 ; PRIOR APPLICATION NUMBER: 60/147,020
 ; PRIOR FILING DATE: 1999-08-03
 ; PRIOR APPLICATION NUMBER: 60/131,672
 ; PRIOR FILING DATE: 1999-04-29
 ; PRIOR APPLICATION NUMBER: 60/130,693
 ; PRIOR FILING DATE: 1999-04-23
 ; NUMBER OF SEQ ID NOS: 32
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 27
 ; LENGTH: 443
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-10-067-422-27

Query Match 53.4%; Score 2232; DB 12; Length 443;
 Best Local Similarity 59.8%; Pred. No. 2.4e-178;
 Matches 409; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 160 RLKPIILASAKOHSPTVEGAVEVKYEGHWRQVCDQGTMTNNSRVVCGMLGFPSEV 219
 DB 29 RLKPIILASAKOHSPTVEGAVEVKYEGHWRQVCDQGTMTNNSRVVCGMLGFPSEV 88
 QY 220 YRKVDLKMEDPKSRSLKSLTNKNSFWIHQVTCLTGTEPHMANCOVQVAPARGK 279
 DB 89 YRKVDLKMEDPKSRSLKSLTNKNSFWIHQVTCLTGTEPHMANCOVQVAPARGK 148
 QY 280 MHAVVSCVAGPHRPPKTKPORKGSAEPRVRLRSGAOGEGRVEVLMNRQWGTVC 339
 DB 149 MHAVVSCVAGPHRPPKTKPORKGSAEPRVRLRSGAOGEGRVEVLMNRQWGTVC 208
 QY 340 WNLISASVVCRLGFGSAREALFARLQGLGPIHLSEVRCRGYERTLSDCPALEGS 399
 DB 209 WNLISASVVCRLGFGSAREALFARLQGLGPIHLSEVRCRGYERTLSDCPALEGS 268
 QY 400 COHENAANVCNVPNMGFQNOVRIAGRIPEEGLELLEVOVNVGVPWPGVSCSENW 459
 DB 269 COHENAANVCNVPNMGFQNOVRIAGRIPEEGLELLEVOVNVGVPWPGVSCSENW 328
 QY 460 MVACRQLGLGFAIHAYKETWFSWGTTPRAQEVVMSGVRCSTGTELALQOCQ 519
 DB 329 MVACRQLGLGFAIHAYKETWFSWGTTPRAQEVVMSGVRCSTGTELALQOCQ 488
 QY 520 GRFLAGVSCMDSAPDLVMAQLVOETAYLEDRLPSQLYCAHEENCLSKSA 569
 DB 389 GRFLAGVSCMDSAPDLVMAQLVOETAYLEDRLPSQLYCAHEENCLSKSA 438

RESULT 13
 US-09-782-980-17
 ; Sequence 17, Application US/09782980
 ; Patent No. US20020072089A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Khodadoust, Mehran M.
 ; APPLICANT: MacBeth, Kyle J.
 ; APPLICANT: Busfield, Samantha J.
 ; APPLICANT: McCarthy, Sean A.
 ; APPLICANT: Holtzman, Douglas A.
 ; APPLICANT: Gu, Wei
 ; APPLICANT: White, David
 ; APPLICANT: Pan, Yang
 ; TITLE OF INVENTION: NOVEL ITALY, LOR-2, STRIPE, TRASH, BDSF, LRSG, AND
 ; TITLE OF INVENTION: STMT PROTEIN AND NUCLEIC ACID MOLECULES AND USES
 ; TITLE OF INVENTION: THEREFOR
 ; FILE REFERENCE: MNI-121CP

; CURRENT APPLICATION NUMBER: US/09/782,980
; CURRENT FILING DATE: 2001-02-13
; PRIOR APPLICATION NUMBER: PCT/US00/02125
; PRIOR FILING DATE: 2000-01-27
; PRIOR APPLICATION NUMBER: 09/448,076
; PRIOR FILING DATE: 1999-11-23
; PRIOR APPLICATION NUMBER: 09/276,400
; PRIOR FILING DATE: 1999-03-25
; PRIOR APPLICATION NUMBER: 60/117,580
; PRIOR FILING DATE: 1999-01-27
; PRIOR APPLICATION NUMBER: 09/014,195
; PRIOR FILING DATE: 1998-01-27
; PRIOR APPLICATION NUMBER: 09/014,348
; PRIOR FILING DATE: 1998-01-27
; PRIOR APPLICATION NUMBER: 09/086,892
; PRIOR FILING DATE: 1998-05-29
; PRIOR APPLICATION NUMBER: 09/296,208
; PRIOR FILING DATE: 1999-04-21
; PRIOR APPLICATION NUMBER: 09/063,950
; PRIOR FILING DATE: 1998-04-21
; PRIOR APPLICATION NUMBER: 09/561,381
; PRIOR FILING DATE: 2000-04-28
; PRIOR APPLICATION NUMBER: 09/561,810
; PRIOR FILING DATE: 2000-04-28
; PRIOR APPLICATION NUMBER: 09/087,121
; PRIOR FILING DATE: 1998-05-29
; PRIOR APPLICATION NUMBER: 09/672,721
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: 09/049,799
; PRIOR FILING DATE: 1998-03-27
; NUMBER OF SEQ ID NOS: 176
; SOFTWARE: Patent in Ver. 2.0
; SEQ ID NO 17
; LENGTH: 754
; TYPE: PRT
; ORGANISM: Mus musculus
US-09-782-980-17

Query Match 53.2%; Score 2222; DB 10; Length 754;
Best Local Similarity 54.0%; Pred. No. 3.5e-177;
Matches 413; Conservative 111; Mismatches 195; Indels 46; Gaps 11;

QY 13 LLLL-----GQPPP--SRPQSLGT--TKLRLVGPESKPEERLEVLHQGWGTVCDD 60
DB 14 LLLHCLCSFVSVPSPSPISPEKKVSGOGLRFRLAGPRKPYEGRVEIQRAGEWGTICDD 73
QY 61 NFAIQEATVACROLGFEAALTWAHSAKYQGGEPILWLDNVRVCVTESLDOCGSNGWVS 120
DB 74 DFTLQAHLVCLRELGFTEATGTHSAKYPGTGRILWLDNLSCRGTSGVTECASRGWNS 133
QY 121 DCSHSEDVGIVCHPRRHRYLSETVSNALGPQGR-RLEEVRLLKPILASAKHSPVTEGAV 179
DB 134 DCTHDEAGVICKQRLPGF---SDSNVIEVHQLOVEEVLRLPAVEWGRRLPVTGLV 190
QY 180 EVKYEGRHWQVCDQGWMTMNSRVVCGMLGPSEVPVDSHYRYKWDLMKMRDPKSLKSLT 239
DB 191 EVRLPEGSQVCDKGWSAHNSHVVCMLGFPGEKRVNMAFYRLAQQK-----238
QY 240 NKNSFWIHOVTCLTGTEPHMANQVQVAPARGKLRPACPGGMHVVSCVAGPHF-----292
DB 239 -QHSFGLHSVACVGTGEAHLSCSLEFYRANTDTR--CSGGNPAVVSCLGLFYATFTGQK 295
QY 293 RPKTKPKQKGSWABEPRVLRSGAQVGEGRVEVLMMNRQWGTCDHRWNILISASVCRQL 352
DB 296 KQHSKPO-----GEARVRLKGAHQGEGRVEVLKAGTWCTVCDRKNWDLQAASVVCPEL 349
QY 353 GFGSAREALFQARLQGLGIPHLSEVRCRGYERTLSOCPALLEGSONGQCHENAAVRCNV 412
DB 350 GFGTAREALSARMQGMGAHLSEVRCSGQEPSLWRCPKSNITAECDCHSDQDAGVRCNL 409
QY 413 PNMGFONVRLAGRIIEEGLLELVQVEVNGVPRNGSVCSENWGTTEAMVACRQLGLGFAI 472
DB 410 PYTGVTETKIRLSGGRSRYEGRVEVQIGIPGHLRWGLICGDDWGTLEAMVACRQLGLGAN 469

QY 473 HAYKETWFMSTPRAQEVVMSGVRCSGTETALQOCCORHGP-VHCSHGGGRFLAGVSCWDS 531
DB 470 HGLQETWYWD-SGNVTEVMSGVRCTSGSELSNQCAHSHSHITCKTKGTRFTAGVICSET 528
QY 532 APDLVMAOLVOETAYLEDRLPSOLYCAHEENCLSKSADHMDMPYGYRELLRFSTCIYNL 591
DB 529 ASDLLHLSALVOETAYIEDRPUHMLYCAEENCLASSAKSANWPGHRRLLRFSSQIHL 588
QY 592 GRTDFRPKTGRDSWVWHQCHRRHYHSIEVFTHYDILLTLNGSKVAEGHKASFCLDNCPTG 651
DB 589 GRADFRPKAGRHSHWVHCHGHSMDIFTHYDILTNGTKVAEGHKASFCLDTECQED 648
QY 652 LQRRYACANFGEGVTVGCWDTYRHDIDCQWVDITDVGPNYIFQVIVNPHYVEAESDS 711
DB 649 VSKRYECANFGEGVTVGCWDLYRHDIDCQWIDITDVKPNILOVWINPNEVAESDFT 708
QY 712 NMLQCRCKYDGHRYVWLHNCHTGNVPANAELSLEQEQRLNNLI 756
DB 709 NNAKCNCKYDGHRIWVHNCHIGDAFSEANRRFRYPOQTNSQI 753

RESULT 14
US-09-909-743-8
; Sequence 6, Application US/09909743
; Patent No. US20020151007A1
; GENERAL INFORMATION:
; APPLICANT: Khodadoust, Mehran et al.
; TITLE OF INVENTION: METHODS OF USE OF A NOVEL LYSYL OXIDASE-RELATED
; TITLE OF INVENTION: PROTEIN
; FILE REFERENCE: MNI-073CP
; CURRENT APPLICATION NUMBER: US/09/909,743
; CURRENT FILING DATE: 2001-07-20
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/448,076
; PRIOR FILING DATE: EARLIER FILING DATE: 1999-11-23
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/276,400
; PRIOR FILING DATE: EARLIER FILING DATE: 1999-03-25
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: Patent in Ver. 2.0
; SEQ ID NO 8
; LENGTH: 754
; TYPE: PRT
; ORGANISM: murine lysyl oxidase-related protein
US-09-909-743-8

Query Match 53.2%; Score 2222; DB 10; Length 754;
Best Local Similarity 54.0%; Pred. No. 3.5e-177;
Matches 413; Conservative 111; Mismatches 195; Indels 46; Gaps 11;

QY 13 LLLL-----GQPPP--SRPQSLGT--TKLRLVGPESKPEERLEVLHQGWGTVCDD 60
DB 14 LLLHCLCSFVSVPSPSPISPEKKVSGOGLRFRLAGPRKPYEGRVEIQRAGEWGTICDD 73
QY 61 NFAIQEATVACROLGFEAALTWAHSAKYQGGEPILWLDNVRVCVTESLDOCGSNGWVS 120
DB 74 DFTLQAHLVCLRELGFTEATGTHSAKYPGTGRILWLDNLSCRGTSGVTECASRGWNS 133
QY 121 DCSHSEDVGIVCHPRRHRYLSETVSNALGPQGR-RLEEVRLLKPILASAKHSPVTEGAV 179
DB 134 DCTHDEAGVICKQRLPGF---SDSNVIEVHQLOVEEVLRLPAVEWGRRLPVTGLV 190
QY 180 EVKYEGRHWQVCDQGWMTMNSRVVCGMLGPSEVPVDSHYRYKWDLMKMRDPKSLKSLT 239
DB 191 EVRLPEGSQVCDKGWSAHNSHVVCMLGFPGEKRVNMAFYRLAQQK-----238
QY 240 NKNSFWIHOVTCLTGTEPHMANQVQVAPARGKLRPACPGGMHVVSCVAGPHF-----292
DB 239 -QHSFGLHSVACVGTGEAHLSCSLEFYRANTDTR--CSGGNPAVVSCLGLFYATFTGQK 295
QY 293 RPKTKPKQKGSWABEPRVLRSGAQVGEGRVEVLMMNRQWGTCDHRWNILISASVCRQL 352
DB 296 KQHSKPO-----GEARVRLKGAHQGEGRVEVLKAGTWCTVCDRKNWDLQAASVVCPEL 349

Wed Apr 2 09:14:00 2003

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QY 353 GFGSAREALFGARLQGGPIHLSVRCRGYERTILSDCPALEGSGONGQCHENAAVPCNV 412
Db 350 GFGTAREALSGARMQGMGAHLSVRCGQEPSPSLWRCPKNIITAEDCSHQDAGVRCNL 409
QY 413 PNMGFONVRLAGGRIPREGLEVOVGVNVPWMSVCSNGLTEAMVACROQLGLGFAI 472
Db 410 PYTGVEKIRLSGSRYSRVEVOIGPIGHLRWGLICDDDWGLTEAMVACROQLGLGAN 469
QY 473 HAYKETWFSCTPRACEVVMVSGVGTALALQOCORHGP-VHCSHGGRFLAGVSCMDS 531
Db 470 HGLQETWYWD-SGNITEVVMVSGVGTGSELSLNOCAHSSHITCKTKTTRTAGVICSET 528
QY 532 APDLVMAQLVQETAYLEDRPLSOLYCAHEENCLSKSDHMDWPPYGRRLRFRSTQIYNL 591
Db 529 ASDLLHLSALVQETAYLEDRPLHMLYCAEENCLASSARSANWPGHRRLLRFSSQIHNL 588
QY 592 GRTDFRPKTRGDSVWVHQCHRRHYSIEVTHYDLTLTLAGSKVAEGHKASFCELEOTNCPTG 651
Db 589 GRADFRPKAGRHGSHVWHECHGHVHSDIETHYDILTPNGTKVAEGHKASFCELEOTECQED 648
QY 652 LQRRYACANFGEQGVTVGCMWDTYRHDIDCQWVDITDVGPNGYIFQVIVNPHYVEAESDFS 711
Db 649 VSKRYECANFGEQGVTVGCMWDLRYHDIQWIDITDVKPGNYILOVIVNPHYVEAESDFS 708
QY 712 NNMLQCKYDGHVWLNHCHTNSVYPAEALSLQEQRLRNLI 756
Db 709 NNAMKCNCKYDGHRIWVHNCIHGDATSEANRRFRERYPGQTSNQI 753

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RESULT 15

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US-09-835-996A-13
; Sequence 13, Application US/09835996A
; Patent No. US20020142953A1
; GENERAL INFORMATION:
; APPLICANT: Ballinger, Dennis
; APPLICANT: Loeb, Debra
; APPLICANT: Montgomery, Julie
; APPLICANT: Tang, Y. Tom
; APPLICANT: Zhou, Ping
; APPLICANT: Goodrich, Ryle
; APPLICANT: Liu, Chenghua
; APPLICANT: Asundi, Vinod
; APPLICANT: Zhao, Qing
; APPLICANT: Wehrman, Tom
; APPLICANT: Drmanac, Radoje
; APPLICANT: Ren, Feiyan
; APPLICANT: Qian, Xiaohong
; APPLICANT: Wang, Dunrui
; TITLE OF INVENTION: MATERIALS AND METHODS RELATING TO LIPID METABOLISM
; FILE REFERENCE: 28110/35915A
; CURRENT APPLICATION NUMBER: US/09/835,996A
; PRIOR FILING DATE: 2001-04-16
; PRIOR APPLICATION NUMBER: US 60/197,137
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: US 09/714,936
; PRIOR FILING DATE: 2000-11-17
; PRIOR APPLICATION NUMBER: US 09/667,298
; PRIOR FILING DATE: 2000-09-22
; PRIOR APPLICATION NUMBER: US 09/631,451
; PRIOR FILING DATE: 2000-08-03
; PRIOR APPLICATION NUMBER: US 09/598,042
; PRIOR FILING DATE: 2000-06-20
; NUMBER OF SEQ ID NOS: 45
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 13
; LENGTH: 732
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (632)
; OTHER INFORMATION: Xaa = unknown or other
; NAME/KEY: misc_feature

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; LOCATION: (672)
; OTHER INFORMATION: Xaa = unknown or other
; NAME/KEY: misc_feature
; LOCATION: (711)
; OTHER INFORMATION: Xaa = unknown or other
; US-09-835-996A-13

Query Match 51.8% Score 2163.5; IB 10; Length 732;
Best Local Similarity 54.38; Pred. No. 2,6e-172;
Matches 407; Conservative
Mismatches 198; Indels 49; Gaps 12;

QY 3 WSPATLFLFL--LLGPPPS-----RPSLGTTKLRLAGPESKPEGRLEVLHQOQWG 55
Db 9 WSPWGLLLCLLSCSSCLGSPSPSTGPEKAGSQG-LRFLGLGFRPKPYEGRVEIQRAGEMG 67
QY 56 TVCDNFPAIQAETVACROLGPEAALTWAHSKYGQGGP;WLDNVRVCVGTESLDDCGSN 115
Db 68 TTDGDDFTLQAAHILCRELGFTGATGTHSAKYGFGTGR WLDNLSGSGTEQSVTECASR 127
QY 116 GMGVSDCSHSEVDGVICHPRRHRGYLSETVSNALGPQGR;LEEVRLKPLASAKOHSPTV 175
Db 128 WGNSSDCTHDEDAVGICKDQRLPGFSDSNVIEV--EHLH/VVEVRIIRPAVGWRPLPVT 185
QY 176 EGAVEVYKYEGRHWRQCDQGTWNNRSVVCGLGPPSEVP/DSHYRYKVKWDLKMRDPKSL 235
Db 186 EGLVEVRLPDGWSQVCDKGWSAHNSHVVCGLGPPSEKR/NAAFY-----RL 232
QY 236 KSLTNKNSFWIHQVTCGLGTEPHMANCQVQAPARGKLRP;CPGGMHAAVVCVAGPHF-- 292
Db 233 LAQROHSEFLGHGACVGTGAHLSLCSLEFVRANDTAR--CPGGGPAVVCVPGPVAAAS 290
QY 293 -----RPPKTPQKGSWAEEPPVRLSRGAOVCGEGRVEVL;NRNMGTVCDHRNLIASVV 348
Db 291 SGQKQOQSKRPQ-----GEVRLKGAHPGEGRVEVLKASTMGTCVYRKWDLHAASVV 344
QY 349 CRQLGFGSAREALFGARLQGGPIHLSVRCRGYERTILSDCPALEGSGONGQCHENAAV 408
Db 345 CRELGFGSAREALSGARMQGMGAHLSVRCSGQELS;WKCPHKNIITAEDCSHQDAGV 404
QY 409 RCNVPNMGFQ-----QVRLAGRIPEEGLLLEVOVEVNGVPRWGSVCSENWGLTEAM 460
Db 405 RCNLPYTGAEIRVHVSLSQIRLUSGGRSQHGEGRVEVOIC;GPGLRWGLICGDDWGLEAM 464
QY 461 VACRQLGLGFALHAYKETWFSCTPRACEVVMVSGVRCSC;TELALQOCORHGP-VHCSHG 519
Db 465 VACRQLGLGVANHGLQETWYWD-SGNITEVVMVSGVRCCT;TELSLOCAHHGTHITCKRTG 524
QY 520 GRFLAGVSCMDSAPDLVMAQLVQETAYLEDRPLSOLY;AHENCLSKSADHMDWPKYGR 579
Db 524 TRFTAGVICSE-ASDLLHLSALVQETAYIEDRPLHMLY;AAEENCLASSARSANWPFYGR 582
QY 580 RLLRSTQIYNLGRTDTRFPKTRGDSVWVHCHRHYSII;VFTHYDLTLTLAGSKVAEGHKA 639
Db 583 RLLRFSQIHNLGRADFRPKAGRHSHVWHECHGHYHST;PFTHYDILTTPXGTVKVAEGHKA 642
QY 640 SPCLEDTNCPTGLORRYACANFGEQGVTVGCMWDTYRHD;DCQWVDITDVGPNGYIFQVIV 699
Db 643 SPCLEDTNCPTGLORRYACANFGEQGVTVGCMWDTYRHD;DCQWVDITDVGPNGYIFQVIV 702
QY 700 NPHYVEAESDFSNNMLQCRCKYDGHVWLNH 729
Db 703 NPNFEVAEXDFTNNAKCNCKYDGHRIWVH 732

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Job time : 33.4918 secs

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